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A REVISION OF THE GENUS *ANOUS*.

BY WITMER STONE.

Having recently had occasion to identify some specimens of *Anous* and make comparison with Gould's types of *A. leucocapillus* and *A. melanops*, I was surprised to find what confusion existed in regard to the proper disposition of the names which have been proposed for several members of the genus.

With the object of straightening out the synonymy of the group I have made a careful study of the literature bearing upon the subject and have examined the large series of specimens in the museum of the Academy of Natural Sciences of Philadelphia, and a number of specimens loaned to me by the U. S. National Museum through the kindness of Mr. Robert Ridgway.

The species of the genus *Anous* are separable into two groups, the larger dark colored birds (*Anous*) and the smaller light colored ones (*Procelsterna*).

Of the latter there seem to be two well marked species, *A. caeruleus* and *A. cinereus*, though Mr. Saunders, strange to say, unites them in his monograph of the Sterninae (Proc. Zool. Soc. 1876, p. 671) without comment.

In regard to the dark colored species there has been no confusion in connection with the two large species, *A. stolidus* and *A. galapagensis*, but when we study the smaller species we immediately find difficulties.

Four names have been employed for the three recognizable species:

*Sterna tenuirostris* Temm. Pl. Col. 202 (1838).

*Anous melanops* Gould. P. Z. S., XIII, p. 103 (1845).

*Anous leucocapillus* Gould. P. Z. S., XIII, p. 103 (1845).

*Anous melanogenys* Gray. Gen. Birds, III, p. 661, Pl. 182 (1849).

Gould's *A. melanops* is regarded by Mr. Saunders as a synonym of *A. tenuirostris* (Temm.) and a comparison of the types with Temminck's plate amply confirms his decision.

The *A. leucocapillus* of Gould, however, is the bird which Mr. Saunders figures and identifies as *A. melanogenys* Gray. What Gray's bird really is I am unable to say; if it is the species with

which Mr. Saunders identifies it, the figure is certainly very poor, but the name will have to be considered a synonym of *A. leucocapillus* Gould.

The sooty brown-black species so well figured and described by Mr. Saunders (P. Z. S, 1876, Pl. LXI, Fig. 3) as "*A. leucocapillus* Gould" seems to be the most distinct of the three, but is, so far as I can ascertain, unnamed. I therefore propose for it the name of *A. atrofuscus*.

The following table will serve to distinguish the species:

- a. General color of plumage sooty-brownish, or blackish slate.
  - b. Size larger, wing 10 ins. or more.
    - c. Plumage sooty-brown . . . . . *A. stolidus*
    - c'. Plumage darker, more slaty . . . . . *A. galapagensis*
  - b'. Size smaller, wing 9 ins. or less.
    - c. Plumage sooty-brown, white of head sharply defined posteriorly . . . . . *A. atrofuscus*
    - c'. Plumage blackish slate, white of head shading gradually into the color of the back.
      - d. Lores light slate colored . . . . . *A. tenuirostris*
      - d'. Lores jet black. . . . . *A. leucocapillus*
- a'. General color of plumage very light gray.
  - b. Nearly pure white beneath. . . . . *A. cinereus*
  - b'. Light gray beneath, nearly uniform with the back.
    - . . . . . *A. caeruleus*

**Anous stolidus** Linn.

*Sterna stolidus* Linn., Syst. Nat., 1, p. 227 (1766).

*Sterna fuscata* Linn., Syst. Nat., 1, p. 228 (1766).

*Sterna pileata* Scop., Del. Faun. et Flor. Insubr., I, p. 92, No. 73 (1786).

*Sterna senex* Leach in Truckey's Exped. to the Congo, App. p. 408 (1818).

*Anous niger* Steph., Shaw's Gen. Zool., XIII, 1, p. 140, Pl. 17 (1825).

*Anous spadiacea* Steph., Shaw's Gen. Zool., XIII, 1, p. 143 (1825).

*Sterna unicolor* Nordm., Erm. Verz. v. Thier and Pfl., p. 17 (1835).

*Anous rousseaui* Hartl., Beitr. Orn. Madagasc., p. 86 (1860).

*Hab.* Intertropical seas north to Gulf coast of United States.

**Anous galapagensis** Sharpe.

*Anous galapagensis* Sharpe, Trans. Philos. Soc., CLXVIII, 1879, p. 469.

*Hab.* Galapagoes Islands.

**Anous tenuirostris** (Temm.).

*Sterna tenuirostris* Temm., Pl. Col. 202 (1838).

*Sterna melanops* Gould., P. Z. S., XIII, p. 103 (1845).

*Hab.* Senegal (Temminck), W. coast of Australia (Gould). Mauritius (Saunders).

The only specimens of this species that I have seen are the two types of Gould's, *A. melanops*, a male and female from Hartman's Abrolhos, Australia. These differ slightly from the figure given by Mr. Saunders, for although the lores are light gray, they are uniform with the side of the neck rather than with the cap and there is a distinct line of demarkation passing from the base of the upper mandible opposite the nostril to the upper edge of the eye, instead of from the gape as drawn in Mr. Saunders' figure.

This species is lighter colored than the next two and the cap is not so white, being nearly uniform pearl gray from the base of the bill to the nape.

**Anous leucocapillus** Gould.

*Anous leucocapillus* Gould, P. Z. S., XIII, p. 103 (1845).

? *Anous melanogenys* G. R. Gray, Gen. Birds III, p. 661, Pl. 182 (1849).

*Anous melanogenys* Saunders, P. Z. S., 1876, p. 670.

*Hab.* Raines Isl., Australia (Gould); Nihan Hawaiian Isls. (U. S. N. M. coll.) British Honduras (U. S. N. M. coll.) Dangerous Archipelago (U. S. N. M. coll.)

The jet black lores and the darker slate black plumage readily distinguish this from the preceding species while the very different tint of the plumage and the difference in extent of the white on the head separate it from the following.

Two specimens in the U. S. National Museum collection, one labelled "Dangerous Archipelago" and the other "Pacific Ocean" belong to this species, and it is probable that all the remarks in the Reports of Peale and Cassin refer to this bird. This seems to be the most abundant species of the genus after *A. stolidus*.

**Anous atrofuscus** sp. nov.

*Anous leucocapillus* Saunders, P. Z. S., 1876, p. 670, not *A. leucocapillus* Gould.

*Hab.* Bristow Isl., New Guinea (Saunders). Montevideo (Coll. A. N. S. Phila.)

The *brown*-black color of the plumage and the uniform white of the crown, sharply contrasted with the brown of the neck easily distinguish this species. Mr. Saunders' figure (P. Z. S., 1876, Pl. LXI, Fig. 3) is an excellent representation of this bird, although in the specimens before me the white of the head does not extend quite so far back.

*Description.*—General color above and below uniform sooty *brown*-black, primaries black, lores, immediately in front of the eyes rather blacker than the sides of the head.

Crown from base of bill to occiput nearly pure white with the line of demarkation between the white and general color of the hind neck *very sharply* defined. Wing 8·75 inch, culmen 1·80.

*Type.*—No. 5,027 collection Acad. Nat. Sci. Philada. (from the collection of the Duke of Rivoli) “Mer de Montevideo.”

One other specimen is in the collection of the Philadelphia Academy (No. 5,028) which was collected in the Southern Pacific by J. K. Townsend.

**Anous cinereus** Gould.

*Anous cinereus* Gould, P. Z. S. 1845, p. 104.

*Hab.* E. Coast of Australia (Gould).

**Anous caeruleus** (Bennett).

*Sterna caerulea* Bennett, Narr. Whaling Voy. round the Globe, II, Appendix, p. 248 (1840).

*Anous parvulus* Gould, P. Z. S., XIII, p. 104 (1845).

*Hab.* South Pacific; Christmas Isl. (Bennett), Dog Isl. (Peale, U. S. Exp'l. Exped. spec. in U. S. Nat. Mus.).